

To: Vann, Bradley[Vann.Bradley@epa.gov]
From: Kiefer, Robyn V NWK
Sent: Fri 9/11/2015 6:45:01 PM
Subject: RE: Cooling loop data to date (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Brad -

I will pass the cooling loop pilot info on to our mechanical engineer to take a look and consider as we review the new site characterization data (Phase 1D effort). We will review validated data and updated cross sections/figures once received and determine if anything changes in our IB alternatives analysis.

Thanks,
Robyn

-----Original Message-----

From: Vann, Bradley [mailto:Vann.Bradley@epa.gov]
Sent: Friday, September 11, 2015 1:18 PM
To: Kiefer, Robyn V NWK
Subject: [EXTERNAL] FW: Cooling loop data to date

Robyn,

Here are the links to everything the state has to date on the cooling loop pilot as performed by Bridgeton LLC. As we move forward with the IB evaluation, please have Paul or others look at this information. EPA is also expecting to receive the validated data and updated cross sections/figures on RIM extent at Area 1 from the Phase 1D effort in late October (best case around October 22). We will also forward that information and would appreciate your team taking this information into account and determine what if anything, it changes from your prior technical assessment regarding the isolation barrier alternatives.

Thanks,

Bradley Vann - Remedial Project Manager

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From: Nagel, Chris [mailto:Christopher.Nagel@dnr.mo.gov]
Sent: Friday, September 11, 2015 12:52 PM
To: Vann, Bradley; Doster, Branden
Cc: Field, Jeff; Schmidt, Aaron; Nagel, Chris
Subject: RE: Cooling loop data to date

Good afternoon Brad,

We post that data on our Bridgeton SLF web page. See the following links:

New or Recent Reports- <http://dnr.mo.gov/bridgeton/index.html>- go to the New Reports section and look for the below hyperlinks, these contain the TMP readings associated with the Heat Extraction Cooling Loop Pilot Study. (Note: the below hyperlinks are live so you can hit "control + click" and the links should take you to each of the documents- these are the same links you will see on the above listed web page).

Sept. 4, 2015 -- Bridgeton Landfill provided a weekly update on the expanded heat removal pilot study's temperature monitoring probes (TMPs).

- * Bridgeton Landfill's request for an expanded heat removal pilot study.PDF Document
<<http://dnr.mo.gov/env/swmp/facilities/docs/heatextractionpilotstudysubmittal072214.pdf>>
- * new <<http://dnr.mo.gov/bridgeton/docs/weeklyreport090415.pdf>> Weekly update -- Heat Removal Pilot Study temperature monitoring probesPDF Document
<<http://dnr.mo.gov/bridgeton/docs/hetmpdata090415.pdf>> . (09/04/15)
- * Weekly update -- Heat Removal Pilot Study temperature monitoring probesPDF Document <<http://dnr.mo.gov/bridgeton/docs/hetempmonprobedata082815.pdf>> . (08/28/15)
- * Weekly update -- Heat Removal Pilot Study temperature monitoring probesPDF Document <<http://dnr.mo.gov/bridgeton/docs/hetempmonprobedata082115.pdf>> . (08/21/15)
- * Weekly update -- Heat Removal Pilot Study temperature monitoring probes.PDF Document <<http://dnr.mo.gov/bridgeton/docs/hetmpdata081415.pdf>> (08/14/15)
- * Weekly update -- Heat Removal Pilot Study temperature monitoring probes.PDF Document <<http://dnr.mo.gov/env/swmp/facilities/docs/hetmpdata080715.pdf>> (08/7/15)

Older Archived Reports- for these older reports you will need to go to the following link to the Archive Page: <http://dnr.mo.gov/bridgeton/BridgetonSanitaryLandfillReports.htm> The below hyperlinks are located about 1/3 of the way down the Archives Page. I have also attached the live hyperlinks below, just control + click and they should take you to the identified page.

Note: the gap in time between the above and below datasets is due to the lapse period between pilot studies (the original in GIW4, the expansion to the first line, and then a second expansion to include heat loops in 12 of 13 GIWs as is currently configured).

Heat Extraction Pilot Study Reports

- * Weekly update -- Heat Removal Pilot Study temperature monitoring probes.PDF Document
<<http://dnr.mo.gov/bridgeton/docs/hetmpdata042415.pdf>> . (04/24/15)
- * Weekly update -- Heat Removal Pilot Study temperature monitoring probes.PDF Document
<<http://dnr.mo.gov/bridgeton/docs/hetmpdata041715.pdf>> (04/17/15)
- * Weekly update -- Heat Removal Pilot Study temperature monitoring probes.PDF Document
<<http://dnr.mo.gov/bridgeton/docs/hetmpdata041015.pdf>> (04/09/15)
- * Weekly update -- Heat Removal Pilot Study temperature monitoring probes.PDF Document
<<http://dnr.mo.gov/bridgeton/docs/hetmpdata040315.pdf>> (04/03/15)
- * Weekly update -- Heat Removal Pilot Study temperature monitoring probes.PDF Document
<<http://dnr.mo.gov/env/swmp/facilities/docs/hetmpdata032715.pdf>> (03/27/15)
- * Weekly update -- Heat Removal Pilot Study temperature monitoring probes.PDF Document
<<http://dnr.mo.gov/env/swmp/facilities/docs/hetmpdata032015.pdf>> (03/20/15)
- * Weekly update -- Heat Removal Pilot Study temperature monitoring probes.PDF Document
<<http://dnr.mo.gov/env/swmp/facilities/docs/hetmpdata031315.pdf>> (03/13/15)
- * Weekly update -- Heat Removal Pilot Study temperature monitoring probes.PDF Document
<<http://dnr.mo.gov/bridgeton/docs/hetmpdata030615.pdf>> (03/06/15)
- * Weekly update -- Heat Removal Pilot Study temperature monitoring probes.PDF Document
<<http://dnr.mo.gov/bridgeton/docs/hetmpdata022715.pdf>> . (02/27/15)
- * Weekly update -- Heat Removal Pilot Study temperature monitoring probes.PDF Document
<<http://dnr.mo.gov/bridgeton/docs/hetmpdata022015.pdf>> (02/20/15)
- * Weekly update -- Heat Removal Pilot Study temperature monitoring probes. PDF Document
<<http://dnr.mo.gov/bridgeton/docs/hetmpdata021315.pdf>> (02/13/15)
- * Weekly update -- Heat Removal Pilot Study temperature monitoring probes.PDF Document
<<http://dnr.mo.gov/bridgeton/docs/hetmpdata020615.pdf>> (02/06/15)
- * Weekly update -- Heat Removal Pilot Study temperature monitoring probes.PDF Document
<<http://dnr.mo.gov/bridgeton/docs/hetmpdata013015.pdf>> (01/30/15)
- * Weekly update -- Heat Removal Pilot Study temperature monitoring probes.PDF Document
<<http://dnr.mo.gov/env/swmp/facilities/docs/hetmpdata012315.pdf>> (01/23/15)
- * Weekly update -- Heat Removal Pilot Study temperature monitoring probes. PDF Document
<<http://dnr.mo.gov/bridgeton/docs/hetmpdata011615.pdf>> (01/19/15)
- * Weekly update -- Heat Removal Pilot Study temperature monitoring probes.PDF Document
<<http://dnr.mo.gov/bridgeton/docs/hetmpdata011215.pdf>> (01/12/15)
- * Weekly update -- Heat Removal Pilot Study temperature monitoring probes.PDF Document
<<http://dnr.mo.gov/bridgeton/docs/hetempmonprobedata010215.pdf>> (01/02/15)
- * Weekly update -- Heat Removal Pilot Study temperature monitoring probes.PDF Document
<<http://dnr.mo.gov/bridgeton/docs/hetmpdata122614.pdf>> (12/26/14)
- * Weekly update -- Heat Removal Pilot Study temperature monitoring probes.PDF Document
<<http://dnr.mo.gov/bridgeton/docs/hetmpdata121914.pdf>> (12/19/14)
- * Weekly update -- Heat Removal Pilot Study temperature monitoring probes.PDF Document
<<http://dnr.mo.gov/bridgeton/docs/hetmpdata121214.pdf>> (12/12/14)
- * Weekly update -- Heat Removal Pilot Study temperature monitoring probes. PDF Document
<<http://dnr.mo.gov/bridgeton/docs/hetmpdata120514.pdf>> (12/05/14)
- * Weekly update -- Heat Removal Pilot Study temperature monitoring probes. PDF Document
<<http://dnr.mo.gov/bridgeton/docs/hetmpdata112814.pdf>> (11/28/14)
- * Weekly update -- Heat Removal Pilot Study temperature monitoring probes.PDF Document
<<http://dnr.mo.gov/bridgeton/docs/hetmpdata112114.pdf>> (11/21/14)
- * Weekly update -- Heat Removal Pilot Study temperature monitoring probes.PDF Document
<<http://dnr.mo.gov/bridgeton/docs/hetmpdata111414.pdf>> (11/14/14)
- * Weekly update -- Heat Removal Pilot Study temperature monitoring probes.PDF Document
<<http://dnr.mo.gov/bridgeton/docs/hetmpdata110714.pdf>> (11/07/14)
- * Weekly update -- Heat Removal Pilot Study temperature monitoring probes.PDF Document
<<http://dnr.mo.gov/bridgeton/docs/hetmpdata103114.pdf>> (10/31/14)

The two main pages that are mentioned above also have the other documents that we have received from RS (i.e. the workplans and responses related to the Heat Extraction pilot study- most if not all of those are included below as hyperlinks).

Bridgeton Landfill responded to questions contained in the department's conditional approval letter on the Expansion of the Heat Extraction Pilot Study -- May 22, 2015.

* Bridgeton Landfill's May 22, 2015 Expansion of the Heat Extraction Pilot Study response letter to the department.PDF Document

<<http://dnr.mo.gov/bridgeton/docs/bslfresponsetocondapprvofexpandedheatextractpilotstudy052215.pdf>>

* Attachment 1 - Drawing.PDF Document

<<http://dnr.mo.gov/bridgeton/docs/attachment1drawingno1.pdf>>

Department response to the Bridgeton Landfill's request for expansion of the Heat Extraction Pilot Study -- May 3, 2015.

* View the department's response PDF Document

<<http://dnr.mo.gov/bridgeton/docs/deptrespnbslfexpnsnofheatextrctnpilotstudy.pdf>> .

Department response to Bridgeton Landfill on their submittal related to an expanded heat removal pilot study and a data review of the July and August Monthly reports by the department's technical consultant -- Sept. 4, 2014.

* Department approval letter for the expanded heat removal pilot study and a data review by the department's technical consultant.PDF Document

<<http://dnr.mo.gov/env/swmp/facilities/docs/bslfexpndedheatremovalpilotstudy090414.pdf>>

* Data package review for July and August 2014 - Todd Thalhamer, P.E.PDF Document

<<http://dnr.mo.gov/env/swmp/facilities/docs/august2014datareview.pdf>>

Let me know if you have any trouble accessing the information or if there is a specific document you need.

Thanks

Chris Nagel

Director

Solid Waste Management Program

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From: Vann, Bradley [mailto:Vann.Bradley@epa.gov]
Sent: Friday, September 11, 2015 11:33 AM
To: Doster, Branden; Nagel, Chris
Cc: Field, Jeff
Subject: Cooling loop data to date

Braden/Chris,

Can we get what you guys have on the cooling loop data collected to date by Republic? We would like to start having the Corps look at it as we further evaluate the IB decision.

Thanks,

Bradley Vann - Remedial Project Manager

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